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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,694	10/07/2003	Kai-Chieh Liang	SLA1325.1	6272

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EXAMINER	
TRAN, PHILIP B	
ART UNIT	PAPER NUMBER
2155	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/680,694	LIANG, KAI-CHIEH	
	Examiner	**Art Unit**	
	Philip B. Tran	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 January 2008*.
2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14 and 27-40* is/are pending in the application.
  4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-14 and 27-40* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on *15 January 2008* is/are: a)☒ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. _____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

Notice to Applicant

1. This communication is in response to amendment filed January 15, 2008. Claims 15-26 and 41-51 have been canceled. Claims 1, 4, 6-7, 27, 30 and 32-33 have been amended. Therefore, claims 1-14 and 27-40 are pending for further examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 10-13, 27 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Hereafter, APA), Specification of the Instant Application (U.S. Pat. Application Pub. No. US 2005/0080840 A1) in view of Carsten Herpel (Hereafter, Herpel), “Elementary Stream Management in MPEG-4”, IEEE, March 1999.

Regarding claim 1, APA teaches a uniform resource identifier (URI) pointer method for the referencing of Motion Picture Coding Expert Group-4 (MPEG-4) data resources carried in an American advanced television systems committee (ATSC) Motion Picture Coding Expert Group-2 (MPEG-2) transport stream file system (TSFS) [see APA, Paragraphs 0005-0008] the method comprising receiving an MPEG-2 TS, with a packetized ATSC TSFS [see APA, Paragraphs 0007-0008] and locating a URI in the Transport Stream (TS) and in response to the URI, accessing an address [see APA, Fig. 1 and Paragraphs 0016-0026].

APA does not explicitly teach retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources.

However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

Regarding claim 10, APA further teaches the method of claim 1 wherein retrieving MPEG-4 resources from ATSC TSFS, in response to accessing the address, includes retrieving MPEG-4 resources selected from the group including audio, video, and systems data [see Paragraph 0008].

Regarding claims 11-12, APA does not explicitly teach the method of claim 10 wherein decoding the MPEG-4 resources includes an action selected from the group including enhancing audio data in the MPEG-2 TS, enhancing video data in the MPEG-2 TS, using the systems data to establish an interactive audiovisual scene and communication link, and establishing an interactive audiovisual scene and communication link in response to decoding MPEG-4 systems data.

However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources and enhancing video data in the MPEG-2 TS, and using the systems data to establish an interactive audiovisual scene and communication link [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

Regarding claim 13, APA does not explicitly teach the method of claim 1 further comprising: caching the retrieved MPEG-4 resources. However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources and enhancing video data in the MPEG-2 TS, and caching the retrieved MPEG-4 resources [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently store MPEG-4 content for an easy accessing and retrieval for later use.

Claim 27 is rejected under the same rationale set forth above to claim 1.

Claims 36-39 are rejected under the same rationale set forth above to claims 10-13.

4. Claims 2-9, 14 and 28-35 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Admitted Prior Art (Hereafter, APA), Specification of the Instant Application (U.S. Pat. Application Pub. No. US 2005/0080840 A1) in view of Carsten Herpel (Hereafter, Herpel), “Elementary Stream Management in MPEG-4”, IEEE, March 1999 and further in view of Waki, et al (Hereafter, Waki), European Patent Application No. EP 1045564 A1.

Regarding claims 2-3, APA and Herpel teach accessing an address in response to the URI includes accessing an address selected from the group including an http address [see APA, Fig. 1 and Paragraphs 0016-0026; Herpel, Pages 316-317 & 323]. APA and Herpel do not explicitly teach the method of claim 1 wherein accessing an address in response to the URI includes accessing an address selected from the group including a local identifier (lid) wherein accessing an address includes accessing a lid URI providing a binding name and access scheme to the objects. However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses a local identifier to provide binding name and access scheme to the objects [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel for an easy access and retrieval of objects later.

Regarding claim 4, APA further teaches using a URI embedded in an Initial Object Descriptor (IOD) to locate resources in the TSFS selected from the group including a Binary Format For Scenes (BIFS) scene description stream and an object descriptor stream [see APA, Paragraphs 0016-0026].

APA and Herpel do not explicitly teach using lid URI. However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses a local identifier to provide binding name and access scheme to the objects [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel for an easy access and retrieval of objects later.

Regarding claims 5-6, APA and Herpel do not explicitly teach the method of claim 4 wherein receiving an MPEG-2 TS, with a packetized ATSC TSFS, includes forming MPEG-4 resources in a hierarchical directory structure wherein forming a hierarchical directory structure includes forming a hierarchical directory structure of Broadcast Inter-Object Request Broker Protocol (BIOP) objects including a Directory Structure Module (DSM)::ServiceGateway, a DSM::Directory, and a DSM::File.

However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses forming MPEG-4 resources in a hierarchical directory structure [see

Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel for an easy access and retrieval of objects later.

Regarding claim 7, APA and Herpel do not explicitly teach the method of claim 6 wherein retrieving MPEG-4 resources from the ATSC TSFS, in response to accessing the address, includes: locating a Download Server Initiate (DSI) message, extracting the Interoperable Object Reference (IOR) for the Service Gateway, parsing the Service Gateway object, extracting IORs for Directory and File objects from the Service Gateway binding structure, and acquiring MPEG-4 resources from the file objects.

However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses locating a DSI message, extracting the IOR for the Service Gateway, parsing the Service Gateway object, extracting IORs for Directory and File objects from the Service Gateway binding structure, and acquiring MPEG-4 resources from the file objects [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

Regarding claim 8, APA further teaches the method of claim 6 wherein receiving an MPEG-2 TS, with a packetized ATSC TSFS, includes receiving an MPEG-4 audio/video stream embedded in the MPEG-2 TS in accordance with ISO/IEC 13818 encapsulation standards, and the method comprising: retrieving the MPEG-4 stream and, wherein decoding the MPEG-4 resources includes decoding the resource retrieved from the ATSC TSFS [see APA, Fig. 1 and Paragraphs 0016-0026].

APA does not explicitly teach retrieving MPEG-4 resources audio/visual stream from the MPEG-2 TS and decoding the MPEG-4 resources.

However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources and decoding the MPEG-4 resources together with the retrieved MPEG-4 audio/visual stream [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

APA and Herpel do not explicitly teach forming a hierarchical directory structure includes forming a hierarchical directory structure of BIOP objects including a DSM::ServiceGateway, a DSM::Directory, and a DSM::File.

However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses forming MPEG-4 resources in a hierarchical directory structure [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel for an easy access and retrieval of objects later.

Regarding claim 9, APA teaches a uniform resource identifier (URI) pointer method for the referencing of MPEG-4 data resources carried in an American advanced television systems committee (ATSC) MPEG-2 transport stream file system (TSFS) [see APA, Paragraphs 0005-0008] the method comprising receiving an MPEG-2 TS, with a packetized ATSC TSFS [see APA, Paragraphs 0007-0008] and locating a URI in the TS and in response to the URI, accessing an address [see APA, Fig. 1 and Paragraphs 0016-0026].

APA does not explicitly teach retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources.

However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

APA and Herpel do not explicitly teach accessing an address in response to the URI includes accessing an address selected from the group including a local identifier (lid) wherein accessing an address includes accessing a lid URI providing a binding name and access scheme to the objects.

However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses a local identifier to provide binding name and access scheme to the objects [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel for an easy access and retrieval of objects later.

Regarding claim 14, APA and Herpel do not explicitly teach accessing an address in response to the URI includes accessing an address selected from the group including a local identifier (lid) wherein accessing an address includes accessing a lid URI providing a binding name and access scheme to the objects and accessing an address in response to the URI includes additionally accessing an address selected from the group including a local cache address and a Web protocol identifier, and the method further comprising: retrieving MPEG-4 resources, in response to accessing the address, from a source selected from the group including a local cache and a website.

However, Waki, in the same field of broadcasting MPEG files in the network endeavor, discloses a local identifier to provide binding name and access scheme to the objects and retrieving MPEG-4 resources, in response to accessing the address, from a source selected from the group including a local cache and a website [see Waki, Paragraphs 0006-0042]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Waki into the teaching of APA and Herpel in order to efficiently store MPEG-4 content for an easy accessing and retrieval for later use.

Claim 27 is rejected under the same rationale set forth above to claim 1.

Claims 28-35 are rejected under the same rationale set forth above to claims 2-9.

Claim 40 is rejected under the same rationale set forth above to claim 14.

Response to Arguments

5. Applicant's arguments have been fully considered but they are not persuasive because of the following reasons:

The objections to the claims have been withdrawn because claims 1, 4, 6-7, 27, 30 and 32-33 have been amended.

The non-statutory obviousness-type provisional double patenting rejection has been withdrawn because the Terminal Disclaimer has been filed.

Based on the broadest reasonable interpretation, admitted prior art (APA) teaches a uniform resource identifier (URI) pointer method and system for the referencing of Motion Picture Coding Expert Group-4 (MPEG-4) data resources carried in an American advanced television systems committee (ATSC) Motion Picture Coding Expert Group-2 (MPEG-2) transport stream file system (TSFS) [see APA, Paragraphs 0005-0008] the method comprising receiving an MPEG-2 TS, with a packetized ATSC TSFS [see APA, Paragraphs 0007-0008] and locating a URI in the Transport Stream (TS) and in response to the URI, accessing an address [see APA, Fig. 1 and Paragraphs 0016-0026].

APA does not explicitly teach retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources. However, Herpel, in the same field of stream management in MPEG endeavor, discloses encapsulating MPEG-4 streams in an MPEG-2 transport stream and retrieving MPEG-4 resources in response to accessing the address and decoding the MPEG-4 resources [see Herpel, Pages 319-322]. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to incorporate the teaching of Herpel into the teaching of APA in order to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See ***In re Keller*, 642F. 2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck* & Co., 800 F. 2d 1091, 231 USPQ 375 (Fed. Cir. 1986)**. Applicant obviously attacks references individually without taking into consideration based on the teaching of combinations of references as shown above. With respect to admitted prior art (APA), appellant seems to argue points the examiner has already construed admitted prior art (APA) does not teach while restricting the arguments on the APA-Herpel combined to arguments of no motivation.

Moreover, appellant argues that there is no motivation to modify or combine the admitted prior art (APA) with the Herpel reference.

In response to Appellant's argument that there is no suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and *that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references.* See **In re Nomiya, 184 USPQ 607 (CCPA 1975).** *However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art.* See **In re McLaughlin, 170 USPQ 209 (CCPA 1971).** *References are evaluated by what they suggest to one versed in the art, rather than by their specific disclosures. The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference.* See **In re Bozek, 163 USPQ 545 (CCPA) 1969.** *Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein.* See **In re Bode, 193 USPQ 12 (CCPA 1977)**. In this case, the reason for combining references admitted prior art (APA) and Herpel is that to efficiently deliver MPEG-4 content based upon MPEG-2 transport protocols by using existing ATSC MPEG-2 methodologies.

In view of the foregoing, the examiner asserts that the cited references (combination of admitted prior art (APA) - Herpel) do teach or suggest the subject matter recited in independent claim. Dependent claims are rejected at least by virtue of their dependency on independent claim and by other reasons set forth above in the rejection portion. Accordingly, the examiner respectfully maintains the rejections for claims 1-14 and 27-40 as shown above.

Conclusion

6. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

> A SHORTENED STATUTORY PERIOD FOR REPLY TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE MAILING DATE OF THIS ACTION. IN THE EVENT A FIRST REPLY IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 CAR 1.136(A) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT, HOWEVER, WILL THE STATUTORY PERIOD FOR REPLY EXPIRE LATER THAN SIX MONTHS FROM THE MAILING DATE OF THIS FINAL ACTION.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tran whose telephone number is (571) 272-3991. The Group fax phone number is (571) 273-8300. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar, can be reached on (571) 272-4006.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Philip B Tran/
Primary Examiner, Art Unit 2155
April 24, 2008